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PATENT SPECIFICATION

DRAWINGS ATTACHED

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COMPLETE SPECIFICATION

Slat-Tilting Device for Venetian Blinds

We, METAL SECTIONS LIMITED, of Oldbury, Birmingham, a British Company, do hereby declare the invention for which we pray that a Patent may be granted to us, and the method by which it is to be performed to be particularly described in and by the following statement:—

This invention relates to a slat-tilting device for venetian blinds and has as an object to provide a tilting device in a convenient form.

In accordance with the invention a slat tilting device comprises a body part, a cover part which is a push fit on to the body part, said parts being shaped to form between them a chamber, a pulley connected to a worm within the chamber on bearings formed in the body part, a worm wheel engaged with the worm and adapted to be engaged with a slat-tilting shaft, said worm wheel being carried by a bearing formed on the body part and a bearing formed on the cover part, and a guard part extending partway around the pulley so as to prevent a cord extending in use around the pulley from being inadvertently separated therefrom, said guard part incorporating a socket portion which fits over the body and cover parts to prevent inadvertent separation thereof.

Reference will now be made to the accompanying drawings in which Figure 1 is an exploded perspective view of one example of a device according to the invention and Figure 2 is a perspective view showing the device in an assembled condition.

The device includes a body part 10 formed as a moulding in a suitable synthetic resin material. The body part 10 includes side walls 11, which project in spaced parallel planes from a base portion 10a. These side walls 11 are joined at their extremities by an end wall 12, and, intermediate wall 12 and base portion 10a, by a wall 13. There is also a back wall (not shown) of rectangular form bounded by walls 11, 12 and 13.

The body part 10 co-acts with a cover part 14 shaped to be a push fit (with or without snap action) onto body part 10. The cover part 14 in fact comprises a shallow rectangular tray. The cover and body parts, in fact define between them a cuboidal chamber in which a worm 15 and a worm wheel 16 are rotatably mounted.

To support the worm 15 the body part is formed on side walls 11 with bearing bushes 17, slots 18 being formed to enable the worm 15 to be sprung into place. To support worm wheel 16 the cover part has a bearing bush 19, a similar bush (not shown) being formed on the back wall of the body. The slots 18 in walls 11 receive projections 20 on the cover edges, whereby the push fit is obtained.

There is also provided a guard part 21 having a guard portion 22 adapted to extend part way around the periphery of a pulley 23 on the square shaft 24 of worm 15. The guard part 21 also includes a socket portion 25 in the form of a short sleeve of square section having at one end recesses 26 for clipping onto the bush 19 and the corresponding bush on the back wall of the body part.

To assemble the device, the sub-assembly of the worm 15 and the pulley 23 is first sprung into its bearing bushes 18 in wall 11. The worm wheel 16 then has one of its trunnions inserted in the bush in the back wall of the body.

The cover member 14 is then pushed into position and the guard member 21 is clipped over the appropriate bushes to hold the body and cover parts together.

In use the device is mounted in the head rail of a venetian blind with a squared shaft (which engages the tilt rollers of the blind) inserted through the square hole 27 in worm wheel 16. The pulley 23 is engaged by the two ends of a blind tilting cord loop arranged so that pulling on opposite sides of the loop

causes turning of the pulley 23 in opposite directions.

WHAT WE CLAIM IS:—

- 5 1. A slat-tilting device for a venetian blind comprising a body part, a cover part which is a push fit on to the body part, said parts being shaped to form between them a chamber, a pulley connected to a worm within the chamber and carried on bearings formed in
10 the body part, a worm wheel engaged with the worm and adapted to be engaged with a slat-tilting shaft, said worm wheel being carried by a bearing formed on the body part and a bearing formed on the cover part, and
15 a guard part extending partway around the pulley so as to prevent a cord extending in use around the pulley from being inadvertently separated therefrom, said guard part incorporating a socket portion which fits over the

body and cover parts to prevent inadvertent separation thereof. 20

2. A slat-tilting device as claimed in claim 1 in which the bearings for the wormwheel are in the form of projecting bushes on the body part and the cover part respectively and said socket portion of the guard part is formed with recesses for clipping over these bushes. 25

3. A slat-tilting device as claimed in claim 1 or claim 2 in which the bearings in the body part for the worm are in the form of bushes slotted at one side to allow the worm to be snapped into position, the cover part having projections received by the slots. 30

4. A slat-tilting device for a venetian blind substantially as hereinbefore described with reference to and as shown in the accompanying drawings. 35

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Chartered Patent Agents,
Agents for the Applicants.

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COMPLETE SPECIFICATION

1 SHEET

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